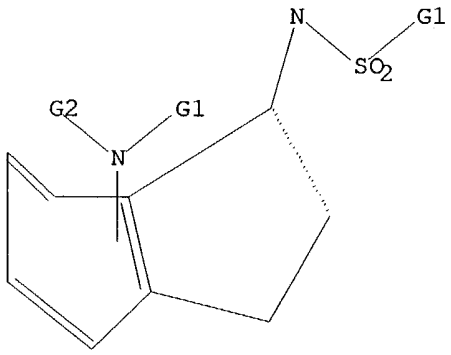

G1 Cb,Hy,Ak

G2 H,Cb,Hy,Ak

Structure attributes must be viewed using STN Express query preparation.

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FULL SEARCH INITIATED 12:47:45 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -  52065 TO ITERATE

100.0% PROCESSED   52065 ITERATIONS                          50 ANSWERS
SEARCH TIME: 00.00.01

L2            50 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               156.26     156.47

FILE 'CAPLUS' ENTERED AT 12:47:54 ON 17 SEP 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 17 Sep 2004  VOL 141 ISS 13
FILE LAST UPDATED: 16 Sep 2004  (20040916/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

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L3 6 L2

=> d l3 1-6 ibib abs hitstr

L3 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:594821 CAPLUS
DOCUMENT NUMBER: 137:154856
TITLE: Preparation of N-indanyl sulfonamides as potassium channel inhibitors
INVENTOR(S): Beaudoin, Serge; Reed, Aimee D.; Gross, Michael
PATENT ASSIGNEE(S): Icagen Incorporated, USA
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

present case

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002060874	A1	20020808	WO 2001-US48601	20011219
WO 2002060874	C1	20030220		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002161011	A1	20021031	US 2001-4867	20011207
EP 1345905	A1	20030924	EP 2001-998049	20011219
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.:	US 2000-256926P	P	20001221
	US 2001-4867	A	20011207
	WO 2001-US48601	W	20011219

OTHER SOURCE(S): MARPAT 137:154856
GI

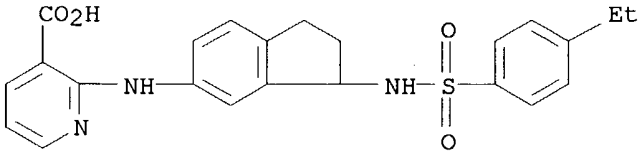
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; A, B, D = C, N, N(O) (wherein at least one of A, B, and D is a substituted C atom and at most only one of A, B, and D is N(O)); E = H, alkyl; G = H, alkyl; or E and G taken together form a bond (site of unsatn.); R1 = H, alkyl, aryl, etc.; R2 = alkyl, aryl, heterocyclyl; R3 = H, alkyl, aryl, etc.; R4 = alkyl, aryl, heteroaryl, etc.; R5, R6 = H, F, alkyl; or R5 and R6 taken together, along with the carbom atom to which they are both attached, form a 3-7 membered carbocyclic or heterocyclic ring; R7 = H, alkyl, OH, etc.; n = 1-3], useful as potassium channel inhibitors and especially useful for the treatment of cardiac arrhythmias and cell proliferative disorders, were prepared Thus, amidation of the amine II (preparation given) with hydrocinnamoyl chloride in the presence of Et3N in THF afforded 21% III which showed 46% inhibition of Kv1.5 at 0.1 μM.

IT **445402-76-6P 445402-81-3P 445402-82-4P**

445402-85-7P 445402-86-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of N-indanyl sulfonamides as potassium channel inhibitors)

RN 445402-76-6 CAPLUS
CN 3-Pyridinecarboxylic acid, 2-[[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]amino]- (9CI) (CA INDEX NAME)



RN 445402-81-3 CAPLUS
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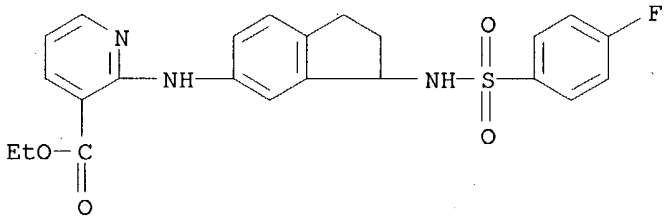

RN 445402-82-4 CAPLUS
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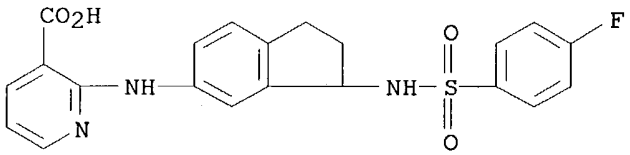
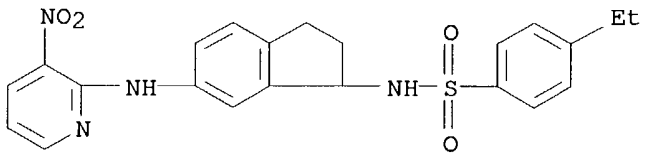
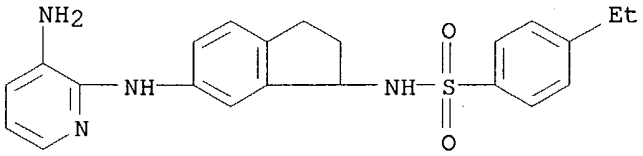


RN 445402-85-7 CAPLUS
CN Benzenesulfonamide, N-[2,3-dihydro-6-[(3-nitro-2-pyridinyl)amino]-1H-inden-1-yl]-4-ethyl- (9CI) (CA INDEX NAME)



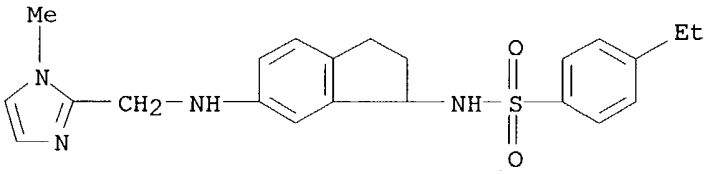
RN 445402-86-8 CAPLUS
CN Benzenesulfonamide, N-[6-[(3-amino-2-pyridinyl)amino]-2,3-dihydro-1H-inden-

1-yl]-4-ethyl- (9CI) (CA INDEX NAME)

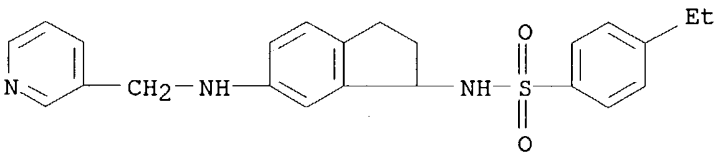


IT **346618-15-3P 346618-17-5P 346618-18-6P 346618-19-7P 346618-20-0P 445402-77-7P 445402-78-8P 445402-79-9P 445402-80-2P 445402-83-5P 445402-84-6P 445402-87-9P 445402-88-0P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-indanyl sulfonamides as potassium channel inhibitors)

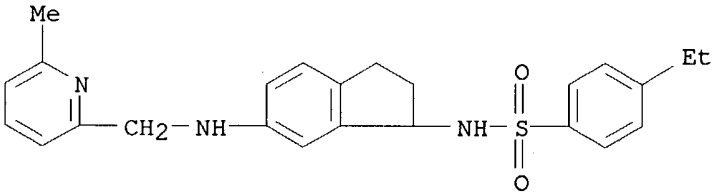
RN 346618-15-3 CAPLUS
CN Benzenesulfonamide, N-[2,3-dihydro-6-[[(1-methyl-1H-imidazol-2-yl)methyl]amino]-1H-inden-1-yl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 346618-17-5 CAPLUS
CN Benzenesulfonamide, N-[2,3-dihydro-6-[(3-pyridinylmethyl)amino]-1H-inden-1-yl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 346618-18-6 CAPLUS
CN Benzenesulfonamide, N-[2,3-dihydro-6-[[(6-methyl-2-pyridinyl)methyl]amino]-1H-inden-1-yl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 346618-19-7 CAPLUS
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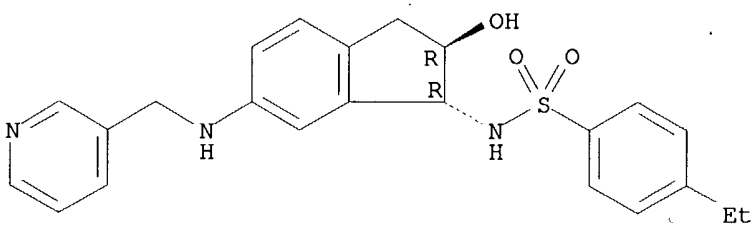
Relative stereochemistry.



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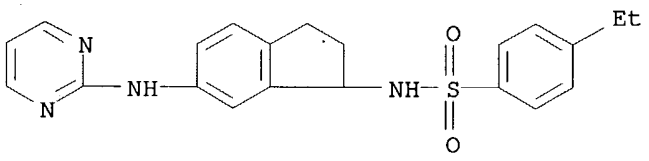
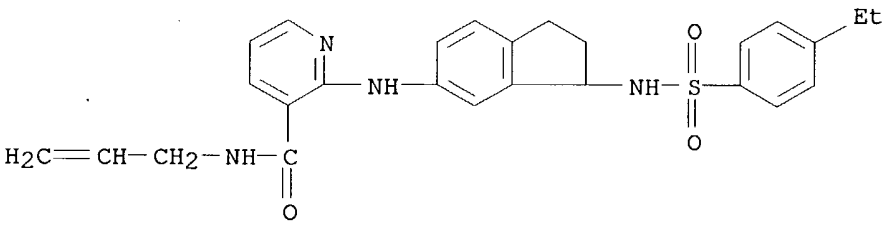


RN 445402-77-7 CAPLUS
CN 3-Pyridinecarboxamide, 2-[[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]amino]-N-2-propenyl- (9CI) (CA INDEX NAME)



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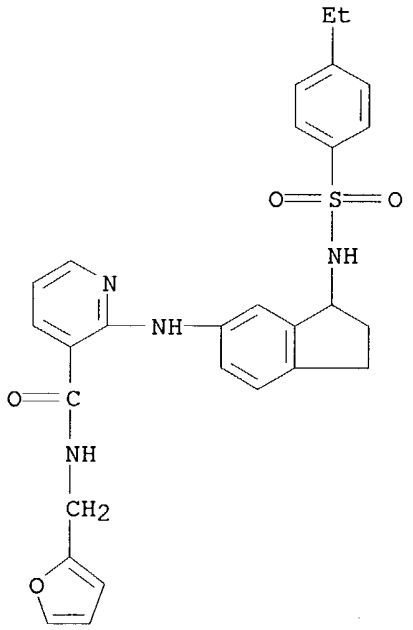

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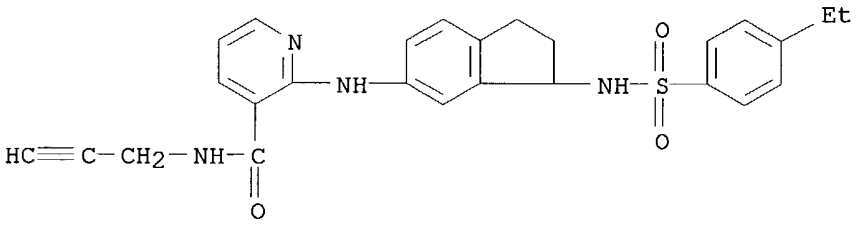
CN 3-Pyridinecarboxamide, 2-[[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]amino]-N-2-propynyl- (9CI) (CA INDEX NAME)



RN 445402-80-2 CAPLUS
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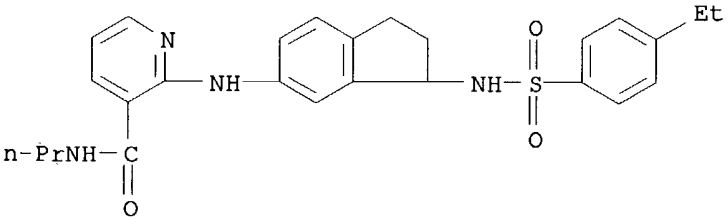

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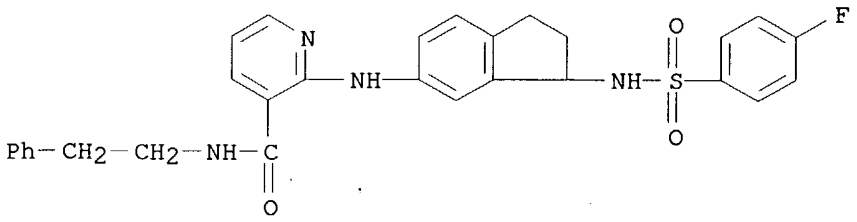
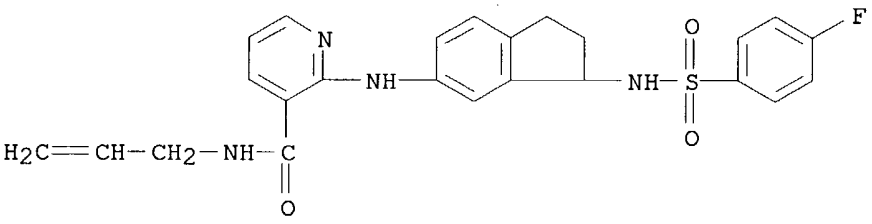


RN 445402-84-6 CAPLUS
CN 3-Pyridinecarboxamide, 2-[[3-[[(4-fluorophenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]amino]-N-2-propenyl- (9CI) (CA INDEX NAME)



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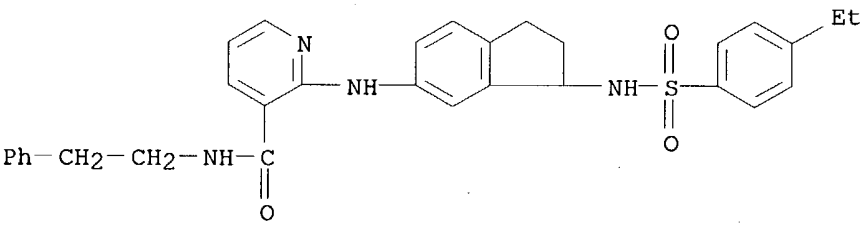
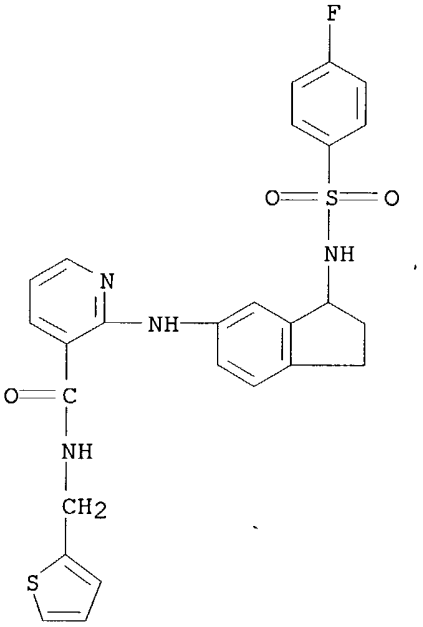


RN 445402-88-0 CAPLUS
CN 3-Pyridinecarboxamide, 2-[[3-[[(4-fluorophenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]amino]-N-(2-thienylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:472680 CAPLUS
DOCUMENT NUMBER: 135:76902
TITLE: Preparation of N-heterocyclylmethyl indanediamines as potassium channel inhibitors
INVENTOR(S): Gross, Michael; Beaudoin, Serge; Reed, Aimee D.
PATENT ASSIGNEE(S): Icagen, Inc., USA
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001046155	A1	20010628	WO 2000-US34765	20001221
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002006929	A1	20020117	US 2000-741085	20001221
US 6458794	B2	20011001		
EP 1240147	A1	20020918	EP 2000-988231	20001221
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JP 2003518101	T2	20030603	JP 2001-547066	20001221
US 2003013706	A1	20030116	US 2002-210064	20020802

PRIORITY APPLN. INFO.:

US 1999-171397P	P	19991221
US 2000-231296P	P	20000908
US 2000-741085	A3	20001221
WO 2000-US34765	W	20001221

OTHER SOURCE(S): MARPAT 135:76902

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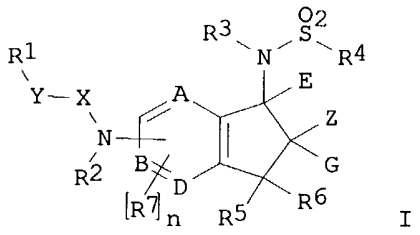

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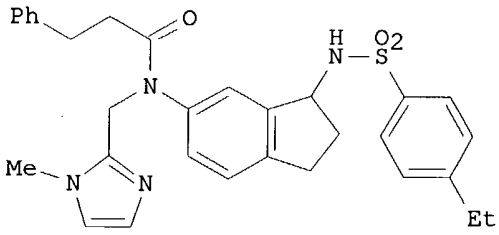


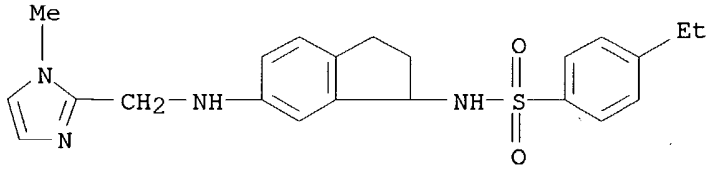
II

AB The title compds. [I; A, B, D = C, N, N(:O) (wherein at least one of A, B, and D is a substituted C and at most only one of A, B and D = N(:O)); E, G = H; E and G taken together form a bond; R1 = H, alkyl, aryl, etc.; Y = a bond, alkyl, alkenyl, etc.; X = CO, CS, SO2; R2, R3 = H, alkyl, aryl, etc.; R4 = alkyl, aryl, heteroalkyl, etc.; R5, R6 = H, alkyl; R7 = H, alkyl, OH, etc.; Z = H, alkyl, OH, etc.; n = 1-3], useful as potassium channel inhibitors and especially useful for the treatment of cardiac arrhythmias and cell proliferative disorders, were prepared E.g., a 2-step synthesis of II which showed 53% inhibition of Kv1.5 at 0.1 μM, was given.

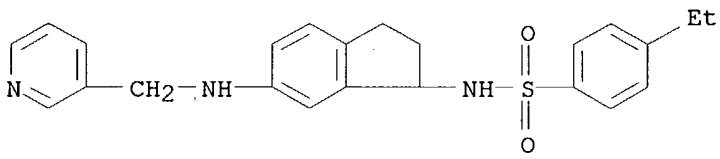
IT **346618-15-3P 346618-17-5P 346618-20-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of N-heterocyclylmethyl indanediamines as potassium channel inhibitors)

RN 346618-15-3 CAPLUS

CN Benzenesulfonamide, N-[2,3-dihydro-6-[[(1-methyl-1H-imidazol-2-yl)methyl]amino]-1H-inden-1-yl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 346618-17-5 CAPLUS
CN Benzenesulfonamide, N-[2,3-dihydro-6-[(3-pyridinylmethyl)amino]-1H-inden-1-yl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 346618-20-0 CAPLUS
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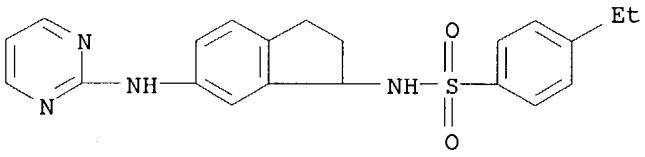

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346618-12-0P 346618-13-1P 346618-18-6P
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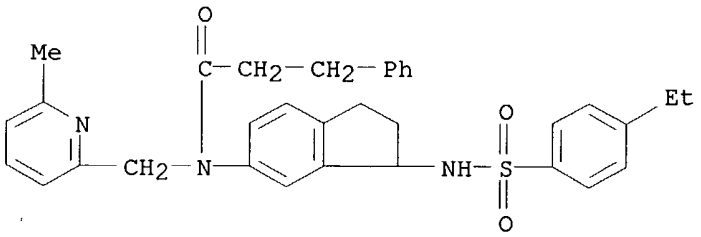
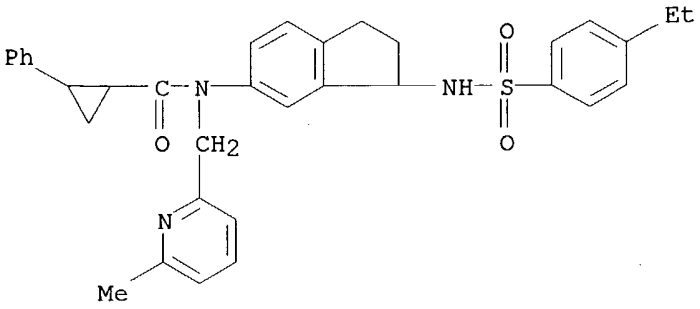
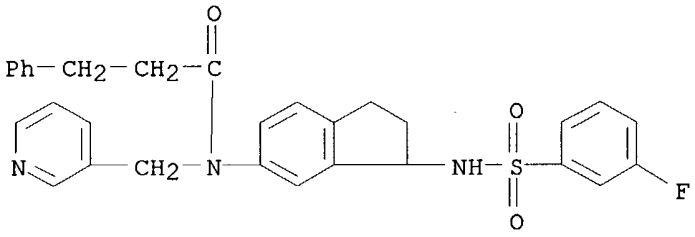
346618-23-3P 346618-24-4P 346618-25-5P
346618-26-6P 346618-27-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-heterocyclylmethyl indanediamines as potassium channel inhibitors)
RN 346618-05-1 CAPLUS
CN Benzenepropanamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-[(6-methyl-2-pyridinyl)methyl]- (9CI) (CA INDEX NAME)



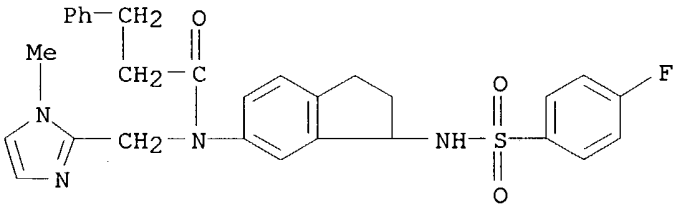
RN 346618-06-2 CAPLUS
CN Cyclopropanecarboxamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-[(6-methyl-2-pyridinyl)methyl]-2-phenyl- (9CI) (CA INDEX NAME)



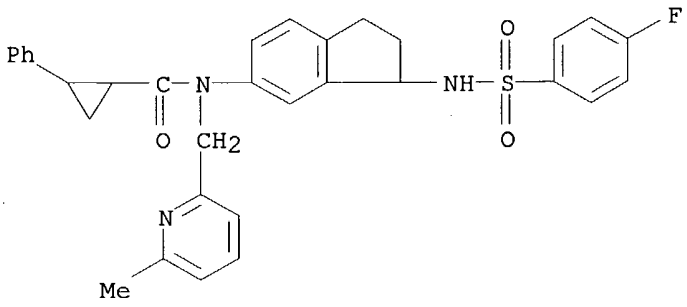
RN 346618-07-3 CAPLUS
CN Benzenepropanamide, N-[3-[[(3-fluorophenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)



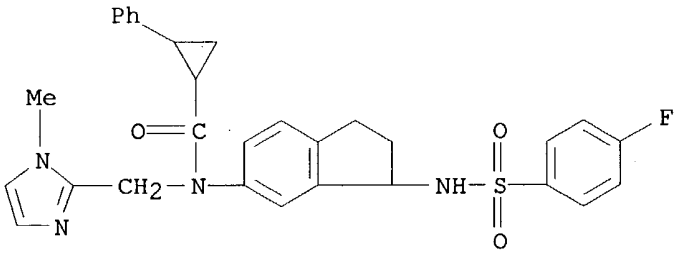
RN 346618-08-4 CAPLUS
CN Benzenepropanamide, N-[3-[[(4-fluorophenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-[(1-methyl-1H-imidazol-2-yl)methyl]- (9CI) (CA INDEX NAME)



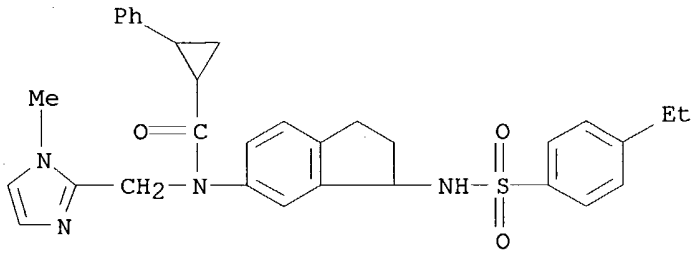
RN 346618-09-5 CAPLUS
CN Cyclopropanecarboxamide, N-[3-[[(4-fluorophenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-[(6-methyl-2-pyridinyl)methyl]-2-phenyl- (9CI) (CA INDEX NAME)



RN 346618-10-8 CAPLUS
CN Cyclopropanecarboxamide, N-[3-[[(4-fluorophenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-[(1-methyl-1H-imidazol-2-yl)methyl]-2-phenyl- (9CI) (CA INDEX NAME)

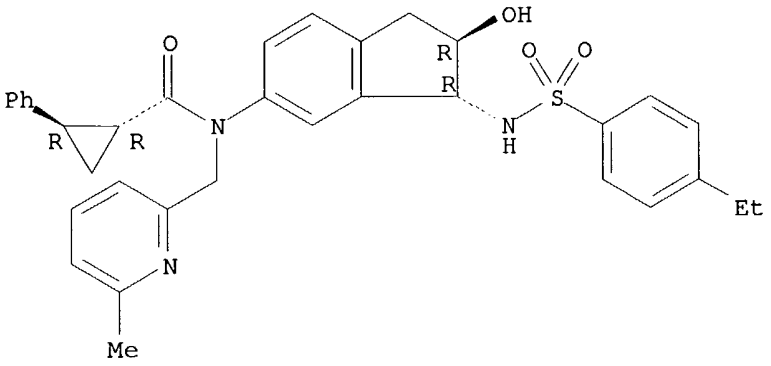


RN 346618-12-0 CAPLUS
CN Cyclopropanecarboxamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-[(1-methyl-1H-imidazol-2-yl)methyl]-2-phenyl- (9CI) (CA INDEX NAME)

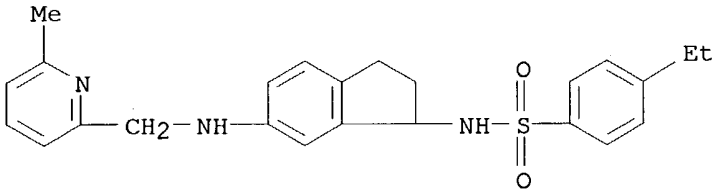


RN 346618-13-1 CAPLUS
CN Cyclopropanecarboxamide, N-[(2R,3R)-3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-2-hydroxy-1H-inden-5-yl]-N-[(6-methyl-2-pyridinyl)methyl]-2-phenyl-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

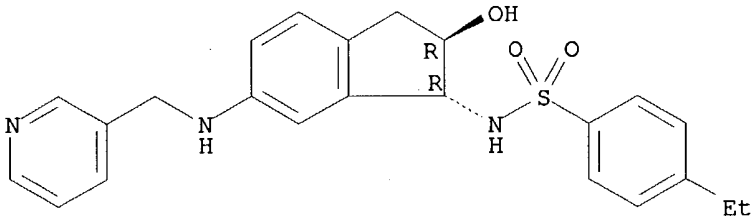


RN 346618-18-6 CAPLUS
CN Benzenesulfonamide, N-[2,3-dihydro-6-[[(6-methyl-2-pyridinyl)methyl]amino]-1H-inden-1-yl]-4-ethyl- (9CI) (CA INDEX NAME)

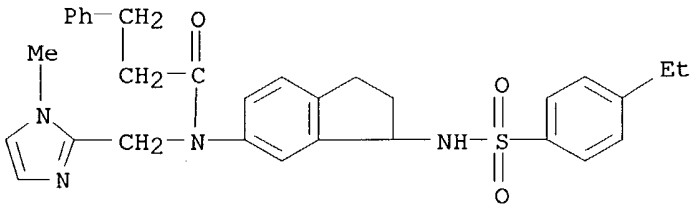


RN 346618-19-7 CAPLUS
CN Benzenesulfonamide, N-[(1R,2R)-2,3-dihydro-2-hydroxy-6-[(3-pyridinylmethyl)amino]-1H-inden-1-yl]-4-ethyl-, rel- (9CI) (CA INDEX NAME)

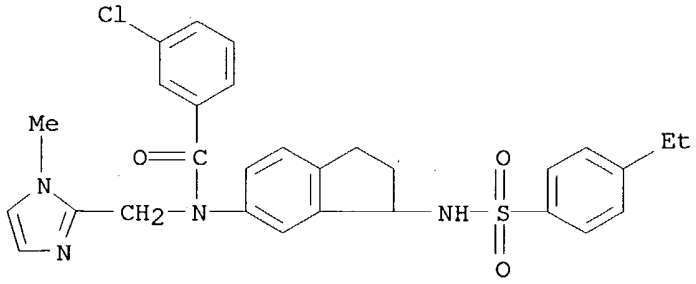
Relative stereochemistry.



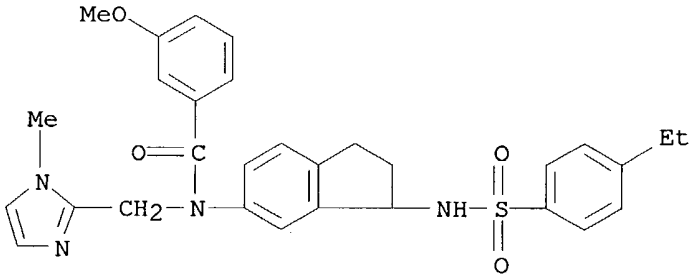
RN 346618-21-1 CAPLUS
CN Benzenepropanamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-[(1-methyl-1H-imidazol-2-yl)methyl]- (9CI) (CA INDEX NAME)



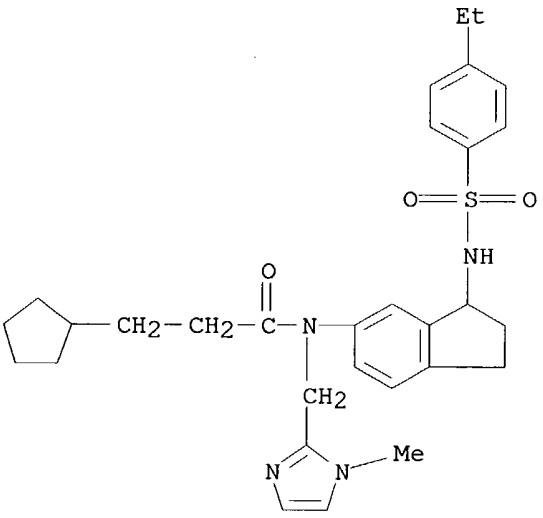
RN 346618-22-2 CAPLUS
CN Benzamide, 3-chloro-N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-[(1-methyl-1H-imidazol-2-yl)methyl]- (9CI) (CA INDEX NAME)



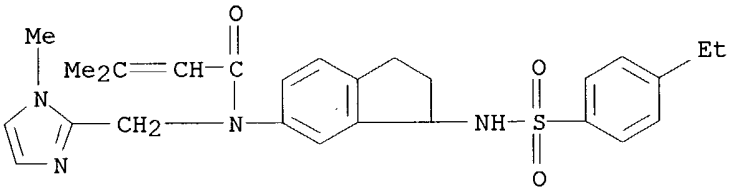
RN 346618-23-3 CAPLUS
CN Benzamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-3-methoxy-N-[(1-methyl-1H-imidazol-2-yl)methyl]- (9CI) (CA INDEX NAME)



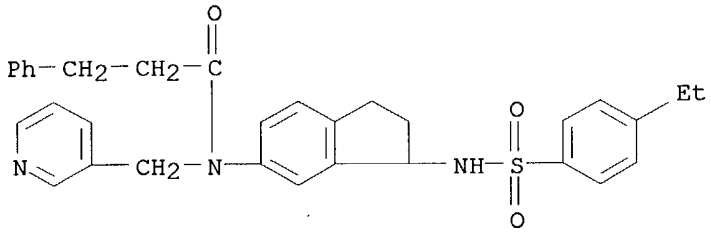
RN 346618-24-4 CAPLUS
CN Cyclopentanepropanamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-[(1-methyl-1H-imidazol-2-yl)methyl]- (9CI) (CA INDEX NAME)



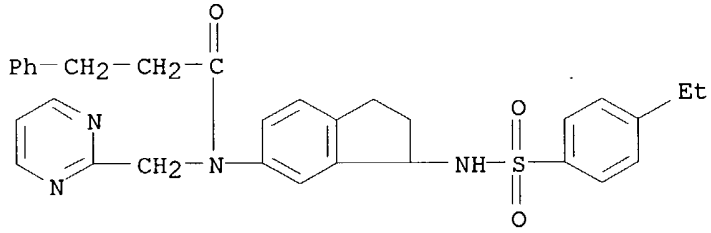
RN 346618-25-5 CAPLUS
CN 2-Butenamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-3-methyl-N-[(1-methyl-1H-imidazol-2-yl)methyl]- (9CI) (CA INDEX NAME)



RN 346618-26-6 CAPLUS
CN Benzenepropanamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)



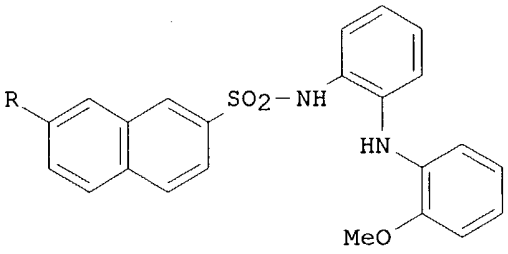
RN 346618-27-7 CAPLUS
CN Benzenepropanamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]-N-(2-pyrimidinylmethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:859492 CAPLUS
DOCUMENT NUMBER: 134:157193
TITLE: Virtual screening for bioactive molecules by evolutionary De novo design
AUTHOR(S): Schneider, Gisbert; Clement-Chomienne, Odile; Hilfiger, Laurence; Schneider, Petra; Kirsch, Stefan; Bohm, Hans-Joachim; Neidhart, Werner
CORPORATE SOURCE: Pharmaceuticals Division, Hoffmann-La Roche Ltd., Basel, 4070, Switz.
SOURCE: Angewandte Chemie, International Edition (2000), 39(22), 4130-4133
CODEN: ACIEF5; ISSN: 1433-7851

PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



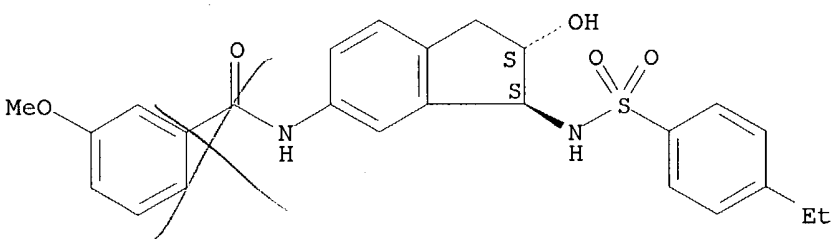
I

AB We present an efficient computational mol. design strategy that implements pharmacophore-guided evolutionary searching in chemical space. Exptl. proof of the concepts is demonstrated by the successful de novo design of a new structural class of potent K+-channel inhibitors. The algorithm TOPAS provides a solution to template-based de novo design, in which novel mols. are assembled taking a given bioactive compound as the reference point (template structure). We selected a known potent K+ channel blocking agent as the template mol. Two mols. (I, R = H, OMe) were synthesized based on the original design recommended by TOPAS. Electrophysiol. measurement proved K+-channel blocking activity for both.

IT **202749-19-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(template; TOPAS algorithm for virtual screening for bioactive mols.: potassium channel blockers)

RN 202749-19-7 CAPLUS
CN Benzamide, N-[(2S,3S)-3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-2-hydroxy-1H-inden-5-yl]-3-methoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:161121 CAPLUS
DOCUMENT NUMBER: 132:207763
TITLE: Preparation of benzopyran, tetrahydroquinoline, pyrano[2,3-b]pyridine, and indan derivatives as

potassium channel inhibitors

INVENTOR(S): Lloyd, John; Finlay, Heather J.; Vaccaro, Wayne; Atwal, Karnail; Gross, Michael F.; Spear, Kerry L.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 210 pp.
CODEN: PIXXD2

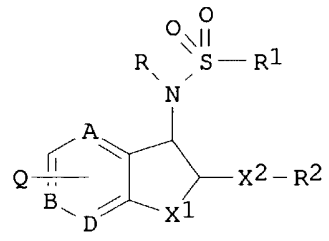
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000012077	A1	20000309	WO 1999-US18599	19990816
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2341678	AA	20000309	CA 1999-2341678	19990816
AU 9956753	A1	20000321	AU 1999-56753	19990816
AU 754204	B2	20021107		
EP 1109544	A1	20010627	EP 1999-943714	19990816
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002523451	T2	20020730	JP 2000-567195	19990816
US 6150356	A	20001121	US 1999-375955	19990817
US 6511977	B1	20030128	US 2000-670285	20000925
US 2004058931	A1	20040325	US 2002-295574	20021115
US 2004067944	A1	20040408	US 2002-295404	20021115
US 6784189	B2	20040831		

PRIORITY APPLN. INFO.:	US 1998-98709P	P	19980901
	WO 1999-US18599	W	19990816
	US 1999-375955	A3	19990817
	US 2000-670285	A3	20000925

OTHER SOURCE(S): MARPAT 132:207763
GI



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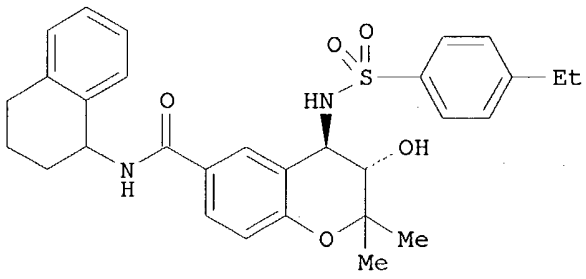


II

AB The title compds. (I) [wherein A, B, and D = independently CH or N; R = H, (aryl)alkyl, alkenyl, aryl, (hetero)cycloalkyl, or cycloalkylalkyl; R1 = (aryl)alkyl, aryl, alkenyl, heterocyclo, NR5-heterocyclo, (hetero)cycloalkyl, cycloalkylalkyl, or (un)substituted amino; or R and R1 taken together with the N-S atoms = a 5- to 8-membered ring; R2 = H, (aryl)alkyl, acyl, carboxymethyl, carbamoylmethyl, etc.; R3 and R4 = independently = H, (aryl)alkyl, cycloalkyl, or R3 and R4 taken together with the C to which they are attached form a 5- to 8-membered ring; R5 = H, (aryl)alkyl, alkenyl, aryl, or cycloalkyl(alkyl); X1 = (CR3R4)n, O, NR5, S, S(O), SO2, -OCR3R4-, -NR5CR3R4-, -SCR3R4-, -S(O)CR3R4-, or -SO2CR3R4-; n = 1-3; X2 = single bond, NR5, or O; Q = substituted NHCH:NCN, acyl, (un)substituted sulfamoyl, or substituted heterocyclo] were prepd by solution phase or solid phase synthesis as antiarrhythmics. For example, II was formed in a 3-step sequence involving: (1) sulfonylation of (trans)-4-amino-3,4-dihydro-2,2-dimethyl-6-cyano-2H-benzopyran with 4-ethylbenzenesulfonyl chloride (85%), (2) hydrolysis of the nitrile to the carboxylic acid using aqueous Na2O2 (33%), and (3) amidation with 1,2,3,4-tetrahydro-1-naphthylamine (51%). I block the delayed rectifier voltage-gated K+ channel (IKur) and are therefore useful in the prevention and treatment of cardiac arrhythmia (no data).

IT **260402-16-2P**

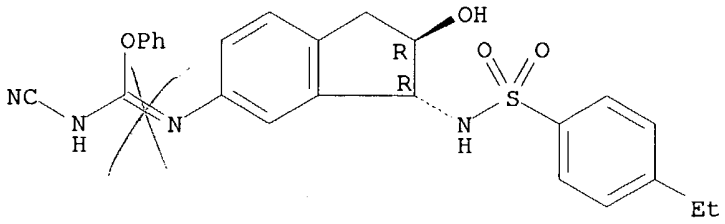
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of arylsulfamido benzopyran, tetrahydroquinoline, pyrano[2,3-b]pyridine, and indan derivs. by solution phase or solid phase synthesis as potassium channel inhibitors for the treatment of arrhythmia)

RN 260402-16-2 CAPLUS

CN Carbamimidic acid, N-cyano-N'-[(2R,3R)-3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-2-hydroxy-1H-inden-5-yl]-, phenyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

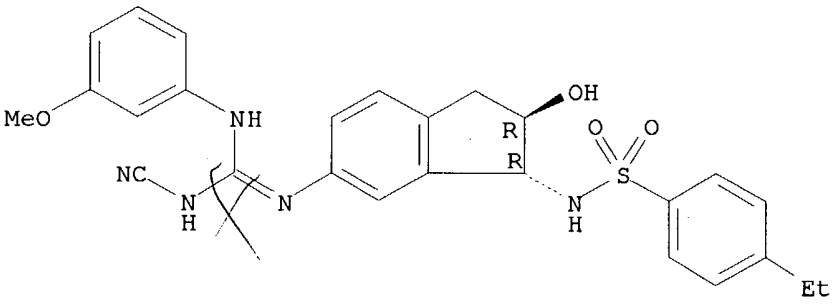


IT **260399-04-0P 260399-05-1P 260399-06-2P**
260399-07-3P 260399-08-4P 260399-09-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compound; preparation of arylsulfamido benzopyran, tetrahydroquinoline, pyrano[2,3-b]pyridine, and indan derivs. by solution phase or solid phase synthesis as potassium channel inhibitors for the treatment of arrhythmia)

RN 260399-04-0 CAPLUS

CN Benzenesulfonamide, N-[(1R,2R)-6-[[(cyanoamino)[(3-methoxyphenyl)amino]methylene]amino]-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-4-ethyl-, rel- (9CI) (CA INDEX NAME)

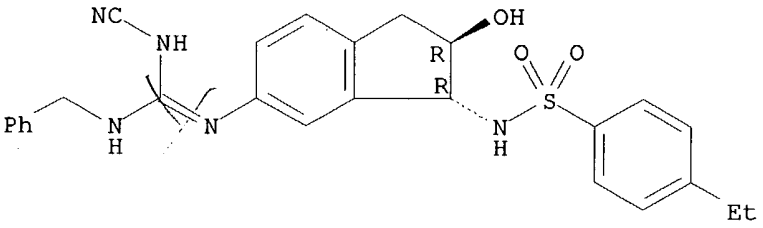
Relative stereochemistry.



RN 260399-05-1 CAPLUS

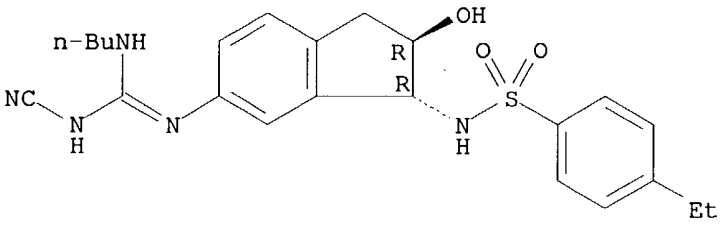
CN Benzenesulfonamide, N-[(1R,2R)-6-[[(cyanoamino)[(phenylmethyl)amino]methylene]amino]-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-4-ethyl-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 260399-06-2 CAPLUS

CN Benzenesulfonamide, N-[(1R,2R)-6-[[(cyanoamino)[(2-phenylethyl)amino]methylene]amino]-2,3-dihydro-2-hydroxy-1H-inden-1-yl]-4-ethyl-, rel- (9CI) (CA INDEX NAME)



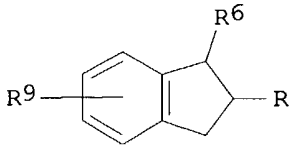
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:105937 CAPLUS
DOCUMENT NUMBER: 128:153932
TITLE: Preparation of N-indanylbenzenesulfonamides and analogs as potassium channel blockers
INVENTOR(S): Castle, Neil Alexander; Hollinshead, Sean Patrick; Hughes, Philip Floyd; Mendoza, Jose Serafin; Wilson, Joseph Wendell; Amato, George; Beaudoin, Serge; et al.
PATENT ASSIGNEE(S): Icagen, Inc., USA; Eli Lilly and Company
SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

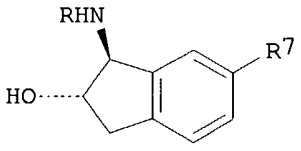
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9804521	A1	19980205	WO 1997-US12559	19970723
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6083986	A	20000704	US 1997-893160	19970715
CA 2261814	AA	19980205	CA 1997-2261814	19970723
AU 9738035	A1	19980220	AU 1997-38035	19970723
AU 734711	B2	20010621		
EP 923543	A1	19990623	EP 1997-934996	19970723
EP 923543	B1	20030924		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9710587	A	20001031	BR 1997-10587	19970723
JP 2002513385	T2	20020508	JP 1998-508884	19970723
AT 250571	E	20031015	AT 1997-934996	19970723
ZA 9706640	A	19980302	ZA 1997-6640	19970725
KR 2000029605	A	20000525	KR 1999-7000669	19990126

PRIORITY APPLN. INFO.:	US 1996-22547P	P	19960726
	US 1997-893160	A	19970715
	US 1996-22547	A	19960726
	WO 1997-US12559	W	19970723

OTHER SOURCE(S): MARPAT 128:153932
GI



I



II

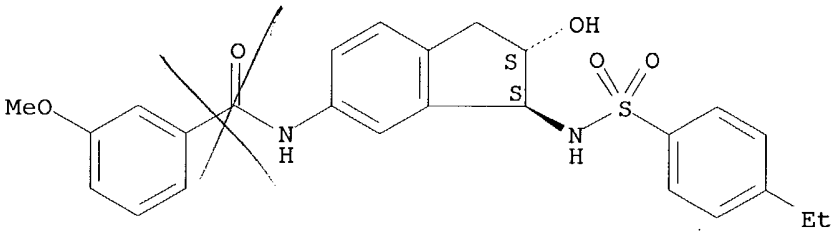
AB Title compds. [I; R = H, OR5, (di)(alkyl)amino, alkoxycarbonylamino, etc.; R5 = H, (CH2)mR8, CO(CH2)mR8; R6 = NR3Z2Z1R1; R1 = H, alkyl, (hetero)aryl, etc.; R3 = H or Me; R8 = (di)(alkyl)amino,, CO2H, alkoxycarbonyl, etc.; R9 = R2Z3Z4NR4; R2 = alkyl, heterocyclyl, (hetero)aryl, etc.; R4 = H or Me; Z1 = CO or SO2; Z2 = bond, O, CH2, NH, CH:CH; Z3 = bond, O, CH2, NH, CH:CH, etc.; Z4 = CO, CS, SO2; m = 1-5] were prepared Thus, indanamine II (R = H, R7 = NO2)(preparation given) was amidated by 4-EtC6H4SO2Cl and the reduced product amidated by 3-(MeO)C6H4COCl to give II [R = 4-EtC6H4SO2, R7 = 3-(MeO)C6H4CONH]. Data for biol. activity of I were given.

IT **202748-98-9P 202748-99-0P 202749-00-6P**
202749-01-7P 202749-02-8P 202749-03-9P
202749-04-0P 202749-19-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-indanylbenzenesulfonamides and analogs as potassium channel blockers)

RN 202748-98-9 CAPLUS

CN Benzamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-2-hydroxy-1H-inden-5-yl]-3-methoxy-, trans- (9CI) (CA INDEX NAME)

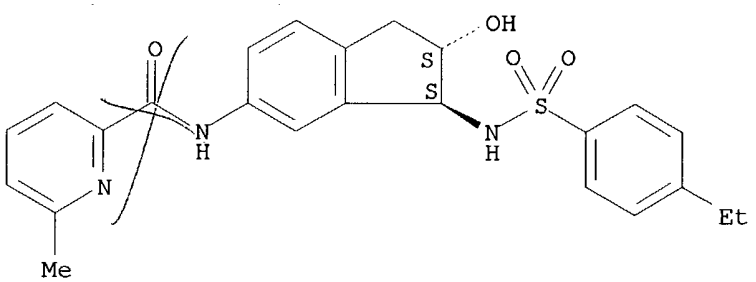
Relative stereochemistry.



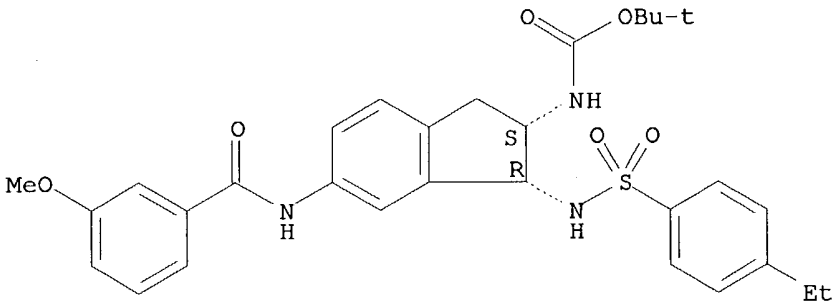
RN 202748-99-0 CAPLUS

CN 2-Pyridinecarboxamide, N-[3-[[(4-ethylphenyl)sulfonyl]amino]-2,3-dihydro-2-hydroxy-1H-inden-5-yl]-6-methyl-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



Relative stereochemistry.

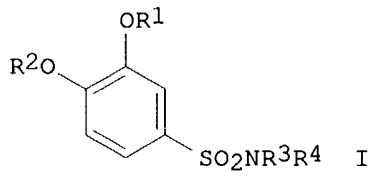


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:38906 CAPLUS
DOCUMENT NUMBER: 126:89137
TITLE: Preparation of 3,4-disubstituted benzenesulfonamides and their therapeutic use
INVENTOR(S): Dyke, Hazel Joan; Montana, John
PATENT ASSIGNEE(S): Chiroscience Limited, UK
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9636596	A1	19961121	WO 1996-GB1205	19960520
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML				
AU 9657723	A1	19961129	AU 1996-57723	19960520
ZA 9604001	A	19970520	ZA 1996-4001	19960520
PRIORITY APPLN. INFO.:			GB 1995-10163 A	19950519
			GB 1995-23677 A	19951120
			WO 1996-GB1205 W	19960520

OTHER SOURCE(S): MARPAT 126:89137
GI



I

AB 3,4-Disubstituted benzenesulfonamides I [R1 = C1-6 alkyl, cycloalkyl; R2 =

C1-3 alkyl; R3 = H, aralkyl, heterocycloalkyl, COR7, SOmR7, C1-6 alkyl; R4 = 5- or 6-membered saturated or unsatd. carbocyclic or heterocyclic ring; R7 = aryl, heteroaryl, heterocyclyl, C1-6 alkyl; m = 1, 2] were prepared and have therapeutic utility via phosphodiesterase IV inhibition (no data). E.g., reaction of 5.04 g 1-aminoindane with 8.99 g 3,4-dimethoxybenzenesulfonyl chloride gave 10.83 g N-(indan-1-yl)-3,4-dimethoxybenzenesulfonamide.

IT **185122-45-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of disubstituted benzenesulfonamides as inhibitors of phosphodiesterase IV)

RN 185122-45-6 CAPLUS

CN Acetamide, N-[1-[[(3,4-dimethoxyphenyl)sulfonyl]amino]-2,3-dihydro-1H-inden-5-yl]- (9CI) (CA INDEX NAME)